

WADE SEINE CONSTRUCTION AND METHOD OF USE

By Hilton M. Floyd*

The wade seine is one of the many and varied types of haul seines used in the fishing industry. Since the fishermen have to wade into the water with this seine, it is used mostly in warm climates. The seine described in this paper is popular along the southeastern coast of the United States, especially in northeastern Florida. Species caught on the Florida coast with the wade seine include mullet (Mugil sp.), spotted or speckled sea trout (Cynoscion nebulosus), king whiting or kingfish (Menticirrhus americanus), white sea trout or weakfish (Cynoscion arenarius), fluke or summer flounder (Paralichthys lethostigma), bluefish (Pomatomus saltatrix), and gafftopsail catfish (Bagre marinus).

The wade seine is one of the easiest seines to construct because it has no tapered netting. Actually it is just a rectangular piece of netting with a floatline, a leadline, and a pole attached to each end for convenience in hauling.

Purchasing a ready-made seine usually saves valuable time; however, some commercial fishermen might save money by building this gear themselves.

This paper will first describe the gear and then tell how it is used.

CONSTRUCTION

Species to be caught and laws governing mesh size and net dimensions are many and varied, so it would be impracticable to describe a "universal" seine--one suitable for all areas of the world. However, a 180-foot-long, 2½-inch stretched mesh seine has proven successful along the southeastern coast of the United States and will be used as the example in this paper.

Synthetic materials are recommended because they are strong and lasting. Materials needed to construct a wade seine can be obtained at most supply houses serving commercial fishermen. Materials needed:

1. Netting--double selvage, 1,440 meshes long (300 feet stretched) and 50 meshes deep. Mesh size--2½ inches (stretch measure) of No. 208 nylon twine. No. 208 twine is about 0.0224 of an inch in diameter.
2. Floatline and breastlines--¼-inch diameter hard-laid nylon rope, 207 feet long.
3. Leadline-- $\frac{5}{16}$ -inch diameter braided leadcore rope (50 pounds per 600 feet), 193 feet long.
4. Net floats (60)--2½ inches diameter by 1½ inch thick by ½-inch hole, made of synthetic or cork material.
5. Hanging-in twine--No. 9 spun nylon, 1 pound. No. 9 twine is about 0.0354 of an inch in diameter.
6. Wood shafts (2)--6 feet long by 2 inches diameter, hickory or equal.
7. Net needle--1 medium size.

Even the amateur fisherman should have no difficulty in constructing a wade seine if he adheres to the following instructions and illustrations.

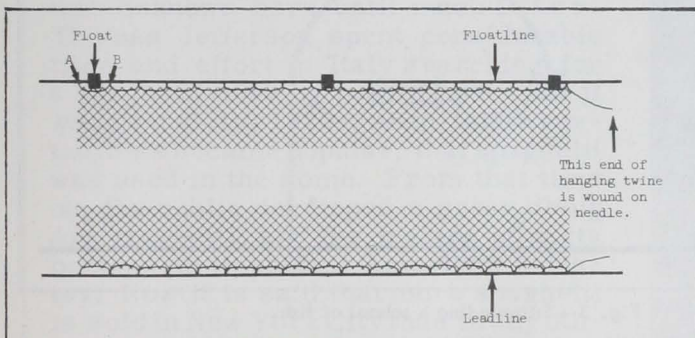
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Cut two 7-foot pieces from the end of the $\frac{1}{4}$ -inch nylon rope for breastlines (vertical lines at ends of net) and set aside. Make sure there are no kinks in the floatline or leadline. String all the floats onto the $\frac{1}{4}$ -inch nylon floatline. Tie one end of both the floatline and leadline to a post or other convenient support at waist level and about 2 inches apart. Secure the opposite ends in this position. Be careful not to stretch one line tighter than the other. If there is not enough room to stretch the lines their entire length, stretch out as much as possible. Now you are ready to start hanging the netting to the lines.

This is where you use the net needle (Knake 1947), a simple tool for storing the twine while the hanging-in is being done. The needle is pointed on one end so that it can be easily passed through the meshes. Near the pointed end is the tongue and at the opposite end is the fork. To fill the needle, take several turns around the base of the tongue with the end of the hanging twine (No. 9 spun nylon), and then wind the twine down the side, around the fork, up the opposite side, around the tongue and back to the other side. Continue winding tightly until the needle is full.

There are different opinions on how slack to hang the netting in a wade seine. Experience has shown that 60 percent of the stretched measurement of the netting gives favorable results. Since the seine described in this paper is of $2\frac{1}{2}$ -inch stretched mesh, 3 meshes will be hung on $4\frac{1}{2}$ -inch ties.

The hanging twine is secured to the floatline and leadline by a clove hitch.



Using a clove hitch, tie the end of the No. 9 spun nylon twine to point A. Then pass the needle through the first 3 meshes on the selvage edge, place a float as indicated, then tie on at point B. Leave $4\frac{1}{2}$ inches between points A and B. Repeat, passing the needle through the next 3 meshes and tying to the floatline, until the hanging is completed. Take up the hanging twine between the ties until the netting hangs about 1 inch below the line.

Space a float after every eighth tie as indicated in the illustration.

The leadline is hung-in the same manner as the floatline.

Fig. 1 - Hanging-in guide.

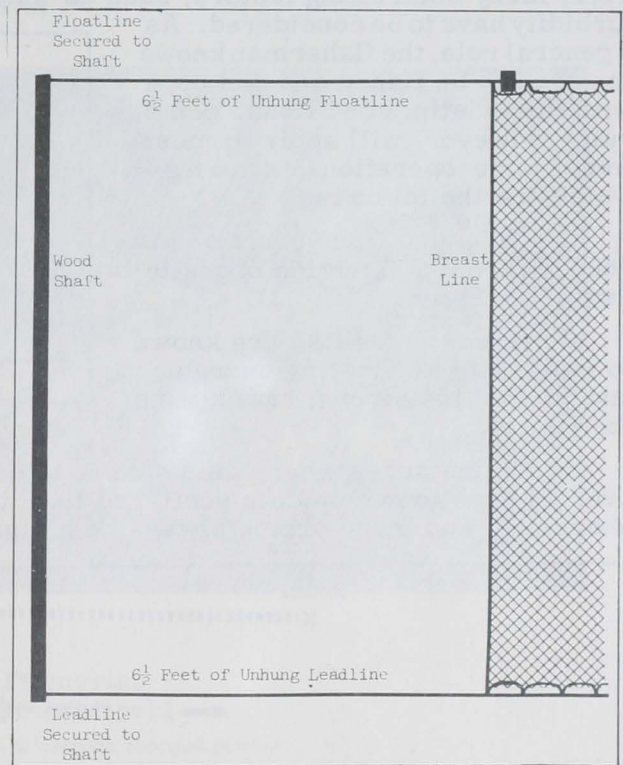


Fig. 2 - End of wade seine.

Using a piece of chalk or other marking device, mark the horizontally stretched floatline at $4\frac{1}{2}$ -inch intervals, beginning $6\frac{1}{2}$ feet from the end.

Use figure 1 as a guide for hanging-in the netting.

The hanging ties on the leadline are made opposite the hanging ties on the floatline. When the hanging-in is completed each line will have exactly the same number of hanging ties.

Next, weave the 7-foot lengths of $\frac{1}{4}$ -inch nylon rope, cut previously through all the meshes at each end of the netting, and use a clove hitch to secure the ends to the floatline and leadline. Lash in place with No. 9 spun nylon.

Use figure 2 as a guide for rigging the ends of the seine.

Make sure you have exactly $6\frac{1}{2}$ feet of unhung floatline and leadline on each end of the seine.

Next, secure the floatline to one end of a wood shaft and the leadline to the other end. Do this on each end of the seine. Use an equal amount of line on both ends in securing them to the shafts. This job completes the wade seine.

Leadcore rope is a relatively new product and certainly lessens the labor in wade seine construction. However, if leadcore rope is not available and individual leads are to be used, use 2-ounce seine leads, spaced at $1\frac{1}{2}$ -foot intervals, on $\frac{1}{4}$ -inch-diameter nylon rope.

A stretcher-type tray is an ideal seine container. This is easily constructed by centering and securing a 3-foot by 5-foot piece of canvas between two $6\frac{1}{2}$ -foot wood shafts.

Always wash and dry the seine thoroughly after each use. A netting preservative compound that is not harmful to synthetic materials is recommended to lessen abrasion.

METHODS

The object of wade seining is to surround the fish and haul them onto the beach. However, many controlling factors, such as water current, type of bottom, movement of fish, and turbidity have to be considered. As a general rule, the fisherman knows the area to be fished and can cope with the existing conditions. Some rules, however, will apply to most wade seine operations, among which are the following:

1. Schooled fish should be surrounded from a direction opposite to that of their travel (fig. 3).

2. If scattered fish are known to move with an existing current, and it is not too strong, haul against the current.

3. In instances where the seine is to be hauled a distance before landing, i.e., dragged over an area to accumulate scattered fish, the offshore end should be well ahead of the inshore end, and there should always be a bight of seine behind the inshore end (fig. 4).

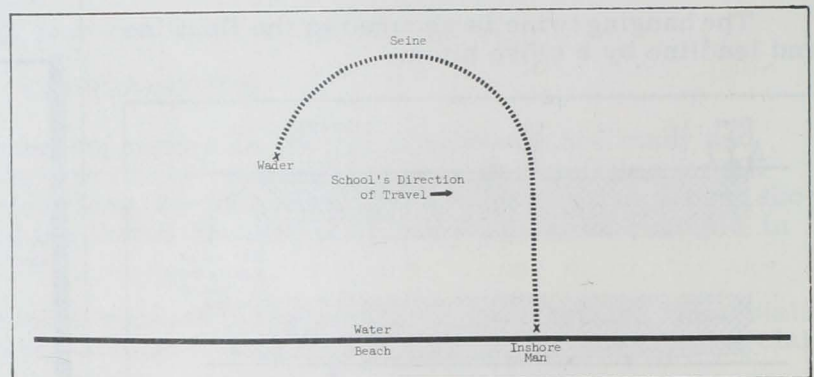


Fig. 3 - Surrounding a school of fish.

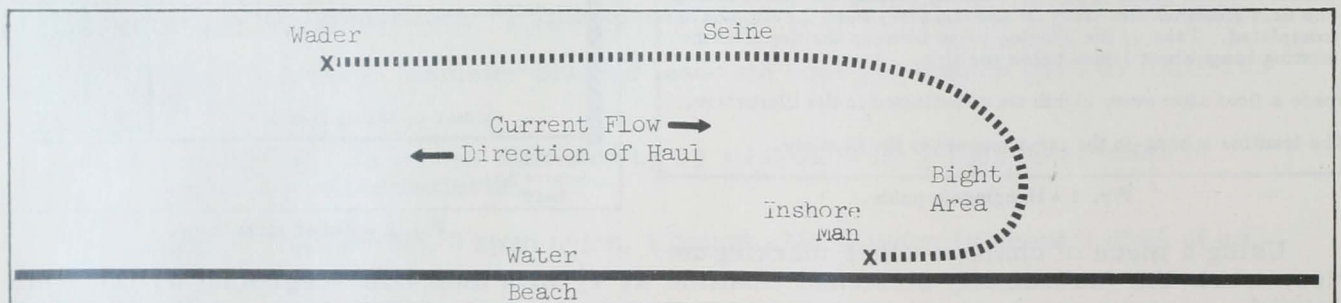


Fig. 4 - Hauling for scattered fish.

4. The inshore man should watch the bight for breaking or jumping fish and signal the wader when it is time to land the catch.

5. Never wade so deep that the net does not touch the bottom. Lack of bottom traction slows the movement of the seine and allows escapement around the offshore end.

6. While landing the net, keep the leadline as close to the bottom as possible, so it will not allow the fish to swim under and escape. Also, if the fish are jumping, holding the floatline up above the water surface will greatly reduce escapement.

7. Always keep noise to a minimum because it will scare the fish offshore. Likewise, lights shown on the water at night may frighten the fish.

Commercial wade seining on the northeast Florida coast is usually carried out by two men, the inshore man (who normally directs the operation) and the wader.

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SHRIMPETTI

Americans have enjoyed macaroni since Revolutionary days, but spaghetti was unknown here until much later. Thomas Jefferson spent considerable time and effort in Italy searching for a spaghetti-making machine. But it wasn't until the 1920s, when Italian restaurants became popular, that spaghetti was used in the home. From that time on, the public developed a great liking for spaghetti, and the making of pasta became an important American industry. Now it is said that more spaghetti is sold in New York City than in any other city in the world! Shrimp and spaghetti, a favorite combination in Italy, have become very popular in the United States. Shrimpetti, featured in many restaurants during Lent, will add sparkle to your home cooking.



SHRIMPETTI

1 tablespoon salt
3 quarts boiling water
8 ounces spaghetti
2 tablespoons butter or margarine
 $\frac{1}{3}$ cup olive oil
1 medium onion, sliced
1 clove garlic, minced
1 $10\frac{1}{2}$ -ounce can condensed tomato soup

$\frac{1}{2}$ cup water
1 tablespoon chopped parsley
1 pound shelled, deveined fresh shrimp,
or 1 (8 or 10 ounce) package frozen shrimp,
shelled and deveined
Salt to taste
Grated Parmesan or Romano cheese

Add 1 tablespoon salt to rapidly boiling water. Gradually add spaghetti so that water continues to boil. Cook, stirring occasionally, until tender. Drain. Meanwhile, melt butter or margarine. Add oil and heat 1 minute. Add onion and garlic and cook over low heat until onion is tender but not browned. Stir in tomato soup, water and parsley; cook over very low heat 10 minutes. Add shrimp and simmer about 5 minutes. Add salt to taste. Spoon over spaghetti. Serve with grated Parmesan cheese. Makes 4 servings. (J. Walter Thompson Co., New York City.)